DIAMOND

D6

CONVERTIBLE SPEAKER INSTALLATION MANUAL

D652 | D662 | D672

SPECIAL THANKS

Dear Valued Customer,

Thank you for choosing Diamond Audio D6 speakers. These speakers represent the latest advances in acoustic technology, and like all Diamond Audio products, are hand built and tested using the highest grade components and state of the art techniques. When installed properly, they will provide many years of accurate sound reproduction.

Please keep in mind that prolonged exposure to sound pressure levels in excess of 100 dB can cause permanent hearing loss. This high performance speaker system can exceed that level, so please exercise restraint in its operation in order to preserve your ability to enjoy its fidelity in the future.

Because of their flexible installation possibilities, please consider having your new speakers professionally installed by an authorized Diamond Audio dealer. This will assure a clean and efficient installation, and extend your one year warranty to three years.

At Diamond Audio, we strive to bring honest value and excellent quality to all of the products we build. By your purchase of this product, you have joined the growing family of discerning listeners who demand only the best. Welcome!

The Diamond Audio Team

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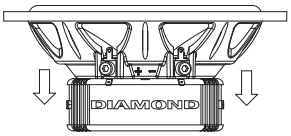
D6 CONVERTIBLE SPEAKER SYSTEMS

FEATURES

- Hard Annodized Aluminum Cone
- Rubber Surround
- High Density Proprietary Composite Frame
- Flat Progressive Spider
- Inductively Controlled Motor Design
- Rubber Boot Magnet Protector
- Model Specific Crossovers

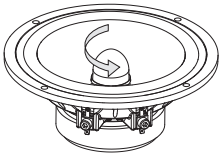
CONVERTIBILITY

Your new D6 speaker system has the unique ability to be used as either a component or a coaxial speaker. Depending on your installation requirements, the tweeter can be installed separately or mounted directly to the midbass/midrange unit with the supplied kit. This provides for the most installation flexibility possible. See the drawing below for more details.



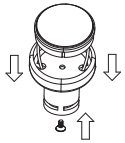
Step 1 - Remove Boot

Carefully remove the rubber boot from the magnet.



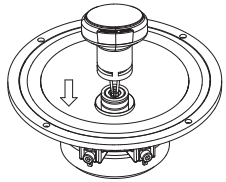
Step 2 - Unscrew Phase Plug

Twist phase plug in a counter-clockwise direction.



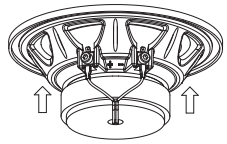
Step 3 - Assemble Tweeter Post

Carefully feed the tweeter wires through the holes and snap tweeter into place on top of the post .Secure with screw.



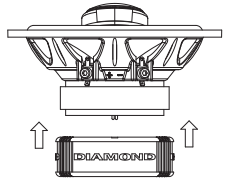
Step 4 - Attach Tweeter

Carefully feed the tweeter wires through the post and through the magnet.



Step 5 - Attach Tweeter Wires

Attach the tweeter wires to their proper terminals.

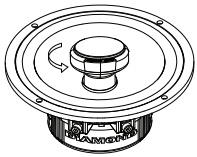


Step 6 - Carefully Replace Boot

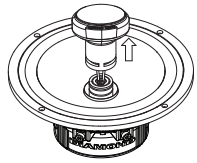
Carefully replace the motor boot to cover and protect the tweeter wires.

Removing the Tweeter

Firmly grasp the tweeter post and turn to unlock until you feel a "click".



After you feel the "click" of the tweeter post unlocking, carefully pull the post straight up from the cone.



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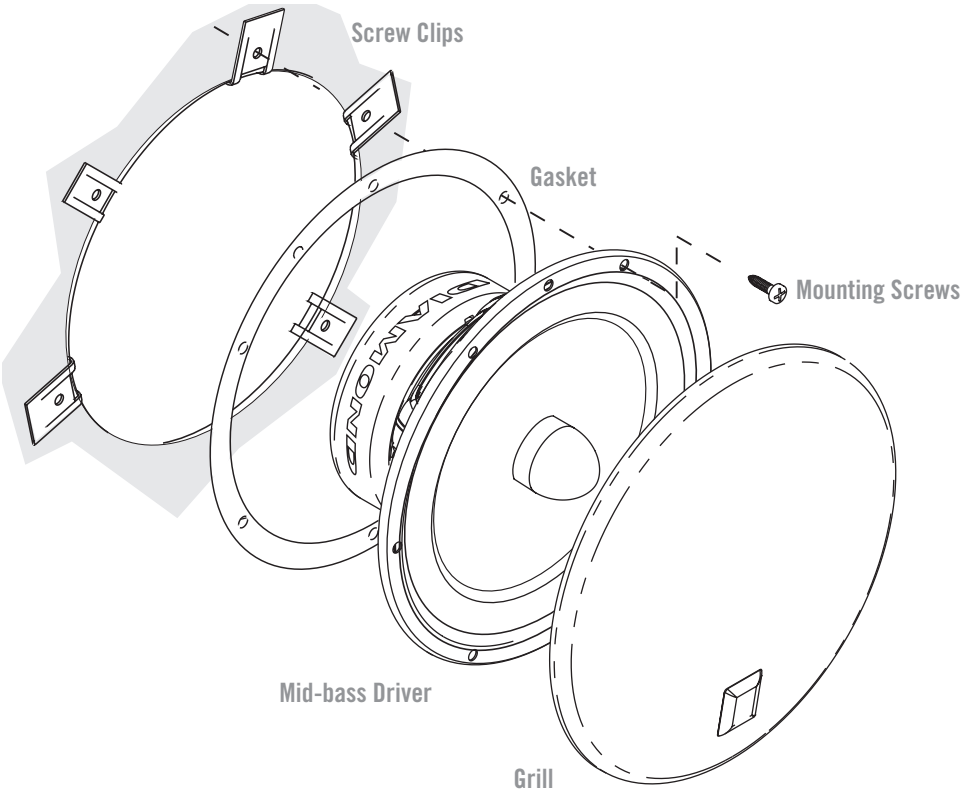
MIDBASS SPEAKER MOUNTING

The following illustrations show the parts included and correct mounting assembly of the D6 midbass speaker and tweeter. The grill on the midbass is optional.

Parts List

(2) D6 Component Midbass/Midrange Speakers
(2) D6 Component Tweeters
(2) D6 Grills w/ Mounting Ring (except D672)
(2) Mounting Gaskets
(1) Mounting Hardware Kit



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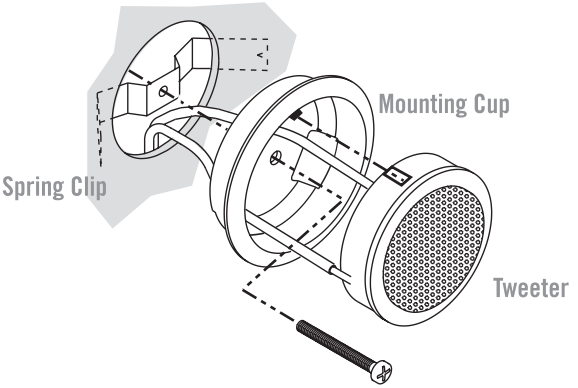


Tweeter Mounting

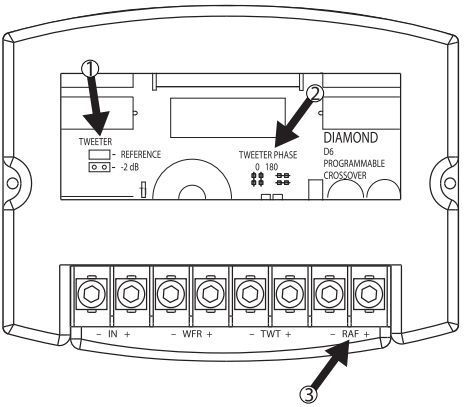
When flush or surface mounting tweeters, make sure the desired location can accommodate the hole size and depth required. Mount the cup using provided hardware (flush mount illustration shown on right.) Mount surface cup at desired angle with provided screws in tweeter mounting kit. Snake speaker wires through tweeter cup, connect tweeter to wires, and snap tweeter into cup by aligning the notches. Be careful not to push on the center of the tweeter grill.

Crossover Programming

Each D6 component set comes with a pair of model specific programmable crossovers. Under the cover there is a jumper marked "TWEETER" "REFERENCE" or "- 2dB" (See ① below). Tweeter attenuation can be achieved by removing the crossover cover and moving the jumper to the appropriate position. The REFERENCE position has no attenuation effect on the tweeter.

Tweeter Phase

When using as a component set with the tweeter mounted in a separate location, performance may be improved by switching the phase of the tweeter. This can be easily achieved by removing the crossover cover and moving the jumper inside the crossover marked "TWEETER PHASE" (See ②).



RAF Outputs

Each D6 component crossover has a third set of outputs marked "RAF"(See ③). This stands for Rear Acoustic Fill. This output can be used to power an additional speaker off the same channel without affecting the impedance load on the source unit. This output provides 15-20% of the total power to the extra speaker and is unfiltered or full range.

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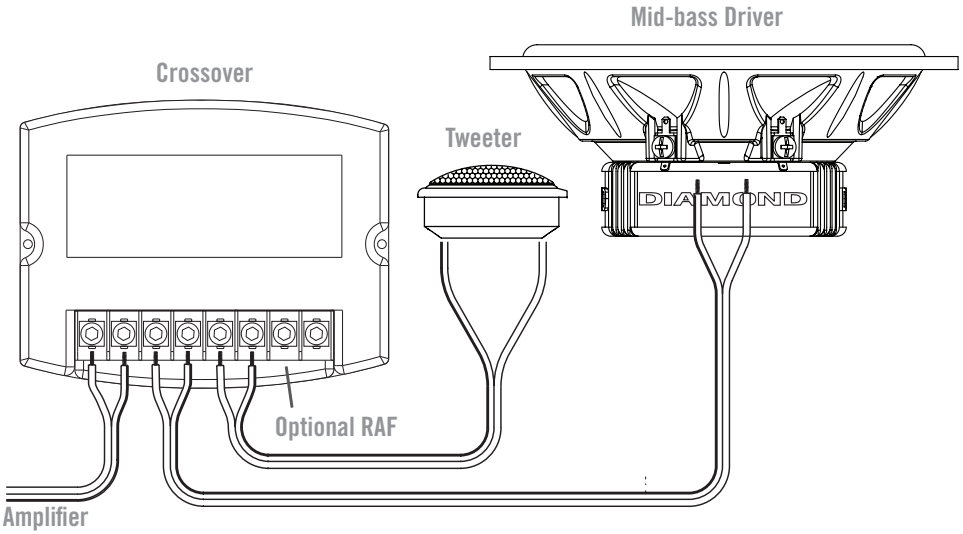
COMPONENT SYSTEM CONNECTION

The illustration below shows how to connect one channel of the D6 component system.



THIELE/SMALL PARAMETERS

Parameter (unit)	D652	D662	D672	S.0ta	S.0ts
Sensitivity	87.4	87.2	86.5	92	91
Qts	0.5	0.82	1.06	0.54	0.65
Fs (Hz)	57.8	60.0	76.0	1650	1520
Vas (L)	11.0	15.6	10.3	n/a	n/a
Re (ohm)	3.6	3.62	3.5	5.6	5.6
Xmax (mm)	3.6	4.8	4.0	n/a	n/a
Impedance (ohm)	4	4	4	8	8
Power (Watts) Nom/Max	60/120	75/150	60/120	50/100	50/100

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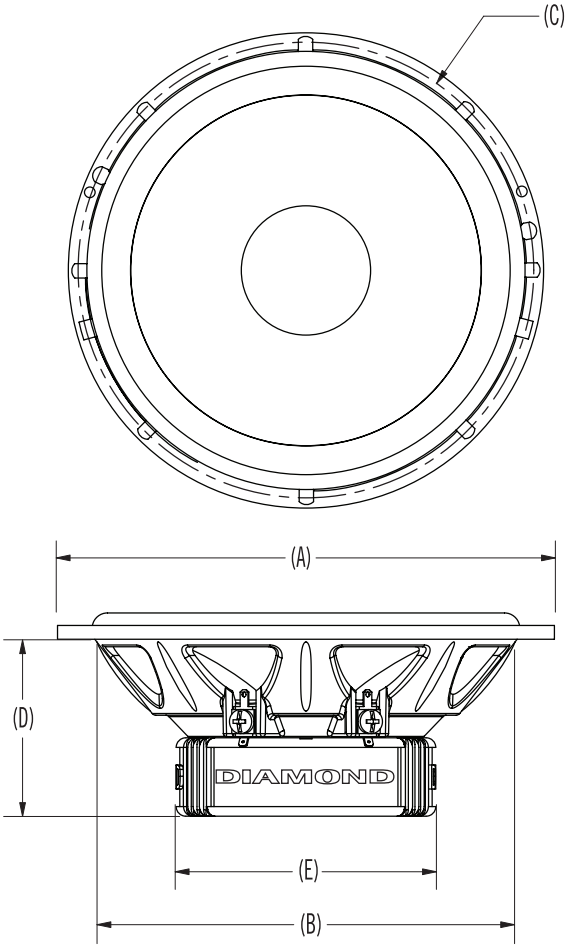
PHYSICAL DIMENSIONS

Dimension	Unit	D652	D662	D672	S.0ta/s
Total Diameter (A)	in. mm	5.57 141.6	6.50 165.4	5.53 x 8.65 140.6 x 219.8	1.9 48.26
Mounting Diameter (B)	in. mm	4.60 117.3	5.50 140.6	6.92 x 4.95 176.0 x 125.8	1.64 41.65
Screw Hole Diameter (C)	in. mm	5.23 133	6.14 156	8.03 x 4.98 204.0 x 126.7	N/A
Mounting Depth (D)	in. mm	2.16 55	2.32 59	2.25 57.2	0.5 12.7
Magnet Diameter (E)	in. mm	3.07 78	3.40 86.4	3.07 78.0	N/A



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LIMITED SPEAKER WARRANTY STATEMENT

Diamond Audio Technologies (DAT) warrants this product to be free from defects in material and workmanship for a period of one (1) year from the original date of purchase provided it was purchased from an authorized DAT retailer within the United States. However, if this product was installed by the authorized DAT retailer, the warranty period will be extended to three (3) years.

THIS WARRANTY IS NOT TRANSFERABLE AND APPLIES ONLY TO THE ORIGINAL PURCHASER OF THIS PRODUCT IN ITS ORIGINAL INSTALLATION. Original purchaser must reside in the United States and be able to provide proof of purchase and installation with the sales receipt from the authorized DAT retailer that sold and installed the product.

Should a manufacturing defect occur during above said warranty period, DAT will replace or repair the defective product with a product of the same or equivalent value and performance.

Damage or failure caused by any of the **following is not covered under this warranty policy:** negligence, improper use, abuse, product modification, unauthorized repair attempts, accident, acts of God, misrepresentations by DAT retailers, and improper/inadequate packaging during return shipping.

Warranty is void if serial numbers have been removed, altered or defaced.

HOW TO OBTAIN WARRANTY SERVICE

In the event a DAT product should require service, you should visit the authorized DAT retailer you purchased the product from and they can expedite your claim. All claims must fall into the guidelines listed above and be accompanied by a copy of the original sales and installation receipt from that authorized DAT retailer.

Product returned for warranty service must be freight-prepaid, properly packaged and clearly marked with the Return Authorization (RA) number issued by DAT. Any product returned to DAT that is improperly packaged, does not have a RA number clearly marked on the package, or never received a RA number may be refused upon delivery. DAT does not assume responsibility for lost or misdirected product.

Repair or replacement under this warranty is the exclusive remedy of the consumer. DAT shall not be liable for any incidental or consequential damages for breach of any expressed or implied warranty on this product. Some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights that may vary from state to state.

Customers outside the United States should contact their local sales office to obtain information on pricing, exchange unit availability, instructions, service and warranty/non-warranty replacement or repair.

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